

## ABSTRACT OF DISCLOSURE

A scanning line alignment compensation apparatus and method for a laser printer. The scanning line alignment compensation apparatus includes a laser scanning unit (LSU) having a first laser diode and a second laser diode and at least one sync signal detection sensor that generates a sync signal based on at least one of the first laser diode and the second laser diode based on selectively driving either of the first laser diode and the second laser diode, and generates at least one offset sync signal having first and second sensor detection periods based on the sync signal generated based on the at least one of the first laser diode and the second laser diode; a compensation unit compensating for first and second video data input in synchronization with a video clock based on the first and second sensor detection periods; and a laser diode control unit outputting control signals to control the first laser diode and the second laser diode based on the compensated first and second video data.